September 29, 2006

Ms. Dana Coale, Deputy Administrator
USDA-AMS-Dairy Programs
1400 Independence Avenue, SW
Washington, D.C. 20250-0225

Via email

Re: Additional Proposals for the Reconvened Class III & IV Hearing

Dear Deputy Administrator Coale,

National All-Jersey Inc. (NAJ) requests the following proposal be included in the next reconvening of this hearing pursuant to the announcement in the June 28, 2006 Federal Register, Volume 71, Number 124 (page 36715). NAJ is a national membership organization of over 1,000 producers and persons interested in equitable milk pricing. NAJ’s mission is to promote programs that price milk to producers in accordance with milk’s most valuable components as determined by consumers’ purchases.

Proposal

NAJ proposes that the value of dry whey should be shifted from other solids to protein. Dry whey’s primary components are lactose (74.4%) and protein (13%). The current pricing formula for other solids places equal value on lactose and protein. NAJ believes the following reasons justify changing dry whey valuation to a protein basis from its current other solids basis.

1. Protein is consistently worth much more than lactose. Dairy Market News reports prices for dry buttermilk, nonfat dry milk, whey protein concentrate-34 (WPC-34), and dry whey, which are sources of protein, and also reports the price for lactose.
In the attached spreadsheet “Protein values for dry dairy products parity”, Table 1 compares the value of these four products per pound of protein with the value of lactose. Dry buttermilk, nonfat dry milk, WPC-34 are each assumed to be 34% protein, while dry whey is assumed to be 13% protein. Dividing the product price by its percent protein (columns titled Protein-parity) shows the cost of buying a pound of protein in that product assuming the value of the non-protein solids portion of the product is zero. The graph titled “Protein parity graph” shows the protein parities of these four products move together because their value depends on the same thing, protein.

Lactose parity can also be calculated by dividing the product price by its percent lactose. Lactose-parity shows the cost of buying a pound of lactose in a given product assuming the non-lactose portion of the product has no value. This was done for WPC-34 and dry whey, and the results are shown in the Lactose-parity columns of Table 1. The graph titled “Protein-lactose parity” shows that protein parity values for WPC-34 and dry whey track each other fairly closely, meaning buyers are willing to pay roughly the same amount per pound of protein for either WPC-34 or dry whey. On the same graph, the lactose parity values for the same two products do not closely track each other. If the value of WPC-34 and dry whey were due to their lactose content, buyers would pay about the same amount per pound of lactose in the two products. Clearly lactose purchased in WPC-34 is far more costly than lactose in dry whey, indicating that the products are not being purchased due to their lactose content. The “Protein – lactose parity” graph plainly demonstrates the value in WPC-34 and dry whey is due to their protein content. On a per pound basis protein values far exceed lactose values. In addition, if the cost of processing lactose is taken into consideration, the net return of lactose approaches zero.

2. Lactose represents a disposal problem for the dairy processing industry. There is limited demand for lactose products, and recent higher prices for lactose reflect a shortage of lactose processing capacity, not a lactose shortage.
3. Federal Order Reform in 2000 was designed to price milk to producers in accordance with the value of dairy products purchased by consumers. Thus, the product values for cheese, butter, nonfat dry milk and dry whey were converted to milk component values for butterfat, protein, other solids and nonfat solids to be used in the classified pricing system to determine minimum regulated prices for producers. In the time since Federal Order reform was enacted, the market for whey products has evolved to the point where today the value of dry whey is overwhelmingly due to its protein content and not its lactose content. Therefore the valuation of dry whey to producers needs to be updated to be protein based instead of equally distributed between protein and lactose.

4. Producers can affect the protein production of their cows and herds through culling, feeding and breeding decisions, but they cannot affect lactose production. Approximately one-half of the nation’s milking herd participates in Dairy Herd Improvement (DHI) production testing, which includes measuring the protein production for individual cows. Dairy producers can use DHI data to identify and cull low protein-producing cows, if they so desire. DHI testing does not include lactose testing.

USDA’s Animal Improvement Programs Laboratory (AIPL) calculates predicted transmitting ability (PTA) genetic estimates for cows and bulls. These PTAs include genetic estimates for protein production. Producers can use these PTAs to make genetic selections for protein improvement through their breeding decisions. AIPL does not calculate PTAs for lactose production.

Significant research has been done in regards to feeding programs that increase protein production. Herd owners can use the results of this research to modify their feeding programs and increase their herds’ protein production. Very little, if any, research has been done in regards to feeding programs that increase lactose production.
Given that the primary value of whey products is due to their protein content and not their lactose content, and given that producers have many tools at their disposal to affect protein production and virtually no tools to affect lactose production, updating the price formula for dry whey to be based on protein instead of other solids will give dairy producers more incentive to improve the production of milk’s most valuable component, protein.

5. This proposal to value dry whey on a protein basis is revenue-neutral for standard milk and is an option that will more correctly reflect economic signals and allow more flexibility in milk valuation. While dry whey continues to be the predominant whey product produced, the whey market is diversifying. If in the future it is determined that other whey products should be included in FMMO price formulas, this proposal provides the mechanism through which their protein values can easily be incorporated.

**Proposed Price Formula Modification**

The purpose of this proposal is to assign the value of dry whey per pound of protein instead of per pound of other solids basis. This can be accomplished as follows:

\[
(Dry\ whey\ price - 0.159) \times 1.03\ yield\ factor = Other\ Solids\ Price
\]

Other Solids Price \times 5.69\ pounds\ of\ Other\ Solids\ per\ cwt.\ in\ standard\ milk = Value of Other\ Solids\ per\ cwt.

Value of Other Solids per cwt. divided by 2.99 pounds of true protein per cwt. of standard milk = dry whey value per pound of true protein

Combining these three formulas results in the following formula:
(Dry whey price \(-0.159\)) \times 1.03 \times 5.69 \text{ divided by } 2.99 = \text{dry whey price per pound of true protein.}

Combined further, the formula becomes:

(Dry whey price \(-0.159\)) \times 1.96 = \text{Dry whey price per pound of true protein.}

The attached spreadsheet titled “Whey Value Contribution” includes calculations that arrive at the same formula by calculating:

- The pounds of whey protein in standard milk,
- A whey protein yield factor,
- The value per pound of whey protein,
- The value of whey protein assigned to all protein.

The attached spreadsheet titled “Whey Value Contribution” demonstrates that the revised formula in this proposal is revenue neutral to the Class III price for federal order standard milk dating back to April 2003.

The dry whey price per pound of true protein would be added to the protein price derived from cheese. The revised protein price formula would be as follows (modification in bold):

\[
\text{Protein Price} = ((\text{Cheese price} - 0.165) \times 1.383) + (((\text{Cheese price} - 0.165) \times 1.572) - \text{Butterfat price} \times 0.9) \times 1.17) + ((\text{Dry whey price} - 0.159) \times 1.96).
\]
The Other Solids price then becomes 0.

Other Solids Price = 0.

Currently the other solids price is used in combination with the protein price to determine the Class III skim milk price using the following formula:

Class III Skim Milk Price = (Protein price x 3.1) + (Other solids price x 5.9).

The revised Class III skim milk price formula would become:

Class III Skim Milk Price = Protein price x 3.1

A final attribute of this proposal is that it eliminates the potential for negative other solids values, which occur when the dry whey price is less than the whey make allowance. While this is a rare occurrence and one that has not happened since 2003, everyone involved in milk marketing faces a challenge when trying to explain to producers why a milk component has a negative value. By assigning the dry whey price to protein, if in the future the dry whey price is less than the whey make allowance, the impact will simply be a lowering of the protein price, not a negative value for other solids. NAJ considers this to be another reason the dry whey protein value should be incorporated into the overall protein price and not separated out as a stand alone Whey Protein Price. The Department is currently considering changes to the make allowances for all commodities. If the make allowance for dry whey is increased, the opportunity for future negative prices for other solids is also increased.

**Proposed Language Changes**

The proposed language changes follow. Language to be eliminated is stricken through, and new language is **bolded**.
§1000.50 Class prices, component prices, and advanced pricing factors.

(i) Class III skim milk price. The Class III skim milk price per hundredweight, rounded to the nearest cent, shall be the protein price per pound times 3.1 plus the other-solids price per pound times 5.9.

(n) Protein price. The protein price per pound, rounded to the nearest one-hundredth cent, shall be computed as follows:

   (1) Compute a weighted average of the amounts described in paragraphs (n) (1) (i) and (ii) of this section:

      (i) The U.S. average NASS survey price for 40-lb. block cheese reported by the Department for the month; and

      (ii) The U.S. average NASS survey price for 500-pound barrel cheddar cheese (38 percent moisture) reported by the Department for the month plus 3 cents;

   (2) Subtract 16.5 cents from the price computed pursuant to paragraph (n) (1) of this section and multiply the result by 1.383;

   (3) Add to the amount computed pursuant to paragraph (n) (2) of this section an amount computed as follows:

      (i) Subtract 16.5 cents from the price computed pursuant to paragraph (n) (1) of this section and multiply the result by 1.572;

      (ii) Subtract 0.9 times the butterfat price computed pursuant to paragraph (1) of this section from the amount computed pursuant to paragraph (n) (3) (i) of this section; and

      (iii) Multiply the amount computed pursuant to paragraph (n) (3) (ii) of this section by 1.17.

   (4) Add to the amount computed pursuant to paragraph (n) (3) of this section the U.S. average NASS dry whey survey price reported by the Department for the month minus 15.9 cents, with the result multiplied by 1.96, rounded to the nearest one-hundredth cent.
(o) **Other solids price.** The other solids price per pound, rounded to the nearest one-hundredth cent, shall be the U.S. average NASS dry whey survey price reported by the Department for the month minus 15.9 cents, with the result multiplied by 1.03.

(q) **Advanced pricing factors.** For the purpose of computing the Class I skim milk price, the Class II skim milk price, the Class II nonfat solids price, and the Class I butterfat price for the following month, the following pricing factors shall be computed using the weighted average of the 2 most recent NASS U.S. average weekly survey prices announced before the 24th day of the month:

1. An advanced Class III skim milk price per hundredweight, rounded to the nearest cent, shall be computed as follows:
   1. Following the procedure set forth in paragraphs (n) and (o) of this section, but using the weighted average of the 2 most recent NASS U.S. average weekly survey prices announced before the 24th day of the month, compute a protein price and an other solids price;
   2. Multiply the protein price computed in paragraph (q) (1) (i) of this section by 3.1;
   3. Multiply the other solids price per pound computed in paragraph (q) (1) (i) of this section by 5.9; and
   4. Add the amounts computed in paragraphs (q) (1) (ii) and (iii) of this section.

§1000.53 **Announcement of class prices, component prices, and advanced pricing factors.**

(a) On or before the 5th day of the month, the market administrator for each Federal milk marketing order shall announce the following prices (as applicable to that order) for the preceding month:

1. The Class II price;
2. The Class II butterfat price;
3. The Class III price;
4. The Class III skim milk price;
5. The Class IV price;
(6) The Class IV skim milk price;
(7) The butterfat price;
(8) The nonfat solids price;
(9) The protein price; and
(10) The other solids price; and
(11) (10) The somatic cell adjustment rate.

NAJ truly appreciates this opportunity to forward potential improvements to the federal milk pricing system to better reflect market economic signals and correctly value the components in producer’s milk. Thank you for your consideration regarding this matter and please contact me with any questions that may arise.

Sincerely,

[Signature]

Erick Metzger
General Manager
National All-Jersey Inc.